STATE ROAD BRIDGE MAINTENANCE WORK PLAN

FIELDS BROOK SUPERFUND SITE
ASHTABULA, OHIO

MARCH 2003
REF. NO. 11676 (25)
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1.0 INTRODUCTION

1.1 GENERAL

Conestoga-Rovers & Associates Inc. (CRA), on behalf of the Fields Brook Action Group (FBAG), has prepared this Work Plan for the Fields Brook Superfund Site (Site), in Ashtabula Ohio (Site). The purpose of this State Road Bridge Maintenance Activities Work Plan is to outline procedures that must be implemented if County workers commence maintenance activities on, or in the area of the State Road bridge. The State Road bridge runs north/south crossing Fields Brook. The bridge divides Exposure Unit 6 (EU6) and Exposure Unit 8 (EU8) as identified in previous Work Plans. This Work Plan must be followed if any excavation or disruption/movement of soil occurs in the vicinity of the State Road bridge.

Remedial activities initially undertaken at the Site involved excavation of PCB and radium impacted soil. As these activities progressed, dense non-aqueous phase liquid (DNAPL) was encountered (October 2002). Following this discovery, the extent of DNAPL and DNAPL residuals (collectively 'DNAPL Material') was delineated, and subsequently, the DNAPL Material was excavated and treated appropriately. The excavation and treatment/disposal of DNAPL Material has been completed and the probability of encountering additional DNAPL Material is minimal. However, should a County workers encounter DNAPL Material in the process of bridge maintenance, construction or demolition, this Work Plan provides the appropriate action measures to be taken.

1.2 SITE BACKGROUND

The Site is comprised of approximately 3.5 miles of creek, and associated wetland/floodplain areas. The Site is located in Ashtabula, Ohio, approximately 55 miles east of Cleveland. Fields Brook flows through both industrial and residential areas, and discharges to the Ashtabula River. The contaminants of concern at the Site included PCBs, hexachlorobenzene, VOCs, and radium.

The remedy for the site included removal of impacted soils from the floodplains and removal of contaminated sediments from the brook, following temporary diversion of brook flow. The excavated areas were backfilled to match pre-existing grades, and the wetland areas restored. The brook channel was restored utilizing a stone mixture designed to restore brook habitat quality. Excavated materials were transferred to a material handling area where they were dewatered and/or solidified, as necessary, to

meet disposal requirements. The majority of the impacted materials were disposed of in an on-Site 3-acre double-lined landfill that has since been capped.

The presence of DNAPL was detected in Exposure Unit 8 (EU8) during remedial activities in October 2000. Four phases of investigation were completed to clarify the source and extent of the DNAPL Material requiring excavation and treatment/disposal. The result of these delineation activities indicated that the DNAPL in EU8 originated in the area of the former Detrex outfall and extended through EU8, passing under the State Road and into EU6. Elevated concentrations of 1,1,2,2-tetrachloroethane, tetrachloroethene, hexachlorobenzene, hexachlorobutadiene, and hexachloroethane were detected in soils at depths of approximately four to six feet below ground surface (bgs).

DNAPL Materials were excavated, treated in an on-Site Low Temperature Thermal Desorption (LTTD) unit, and treated residuals transported back to the excavation for backfilling. Although all visible DNAPL was removed from the area beneath and adjacent to the bridge at State Road, the potential exists that some residual DNAPL Material may be present beneath the bridge structure.

2.0 SCOPE OF WORK

Should County workers, or contractors retained by the County, be required to perform maintenance activities that involve excavation or disruption/movement of soils on or in the area of the State Road bridge this work plan will be followed to ensure the protection of these workers.

The SOW for the Work Plan is organized as follows:

Section 2.1: presents the Oversight of Maintenance Activities;

Section 2.2: presents the methods for Identification of DNAPL Material; and

Section 2.3: presents the DNAPL Material Removal Procedures.

2.1 OVERSIGHT OF MAINTENANCE ACTIVITIES

An FBAG Representative will be on Site to observe maintenance activities. This FBAG Representative will be responsible for:

- ensuring the air monitoring requirements are followed correctly in accordance with the Air Monitoring Plan outlined in Section 2.2; and
- ensuring that if the workers encounter any DNAPL Material, the material is removed in accordance with the procedures outlined in Section 2.3.

2.2 IDENTIFICATION OF DNAPL MATERIAL

On a continuous basis during activities in the work area which could expose residual DNAPL Material, the FBAG Representative will complete perimeter, work area, and breathing zone monitoring utilizing a photoionization detector (PID). The PID will be calibrated on a daily basis in accordance with the manufacturer's instructions. Air monitoring results will be recorded to provide a record of working conditions in the excavation area.

Sustained readings (15 minutes) of 5 parts per million (ppm) over background will result in a work stoppage, and further investigation by the FBAG Representative to determine if conditions exist which warrant further investigation or material removal by FBAG.

If PID screening and inspection of the area by the FBAG Representative identifies potential DNAPL Material, further soil testing will be completed. Soil samples will be collected and analyzed for semi-volatile organic compounds (SVOCs) and volatile organic compounds (VOCs) to determine if DNAPL Material requiring removal are present. U.S. EPA will be notified of the identification of potential DNAPL Material, and provided with the opportunity to oversee or monitor the investigation and removal, as necessary, of DNAPL Material.

2.3 DNAPL MATERIAL REMOVAL PROCEDURES

This section provides procedures to remove DNAPL Material if this material is discovered. If any visible quantity of DNAPL Material is encountered, analytical data identifies DNAPL constituents at levels above cleanup goals for the Site, or unacceptable air quality based on OSHA regulations exists in the work area, impacted material will be removed in accordance with this Plan. Figure 2.1 presents the limits of previous DNAPL Material excavation in the vicinity of the State Road bridge.

2.3.1 EXCAVATION OF DNAPL MATERIAL

If air monitoring, visual inspection, and/or analytical results indicate that DNAPL Material is present at levels requiring removal, the FBAG Representative will procure an appropriately qualified environmental contractor to excavate the material and dispose of it off-Site in accordance with the procedures and Work Plans established during the remediation of the Site. The FBAG contractor will excavate the material, as necessary, to ensure that County activities may be completed in an environment which does not require special protection based on the presence of DNAPL constituents.

The FBAG contractor will remove the DNAPL Material following previously implemented procedures for DNAPL Material removal including:

- diverting creek flow and run-on from work areas to minimize water collected;
- preventing recontamination by beginning excavation at the upgradient end and proceeding downgradient;
- excavated materials shall be transported using leakproof containers or dump trucks that are dedicated to the task. The exteriors of this equipment shall be cleaned of visible soils, on a temporary decontamination pad constructed at the work area, before the equipment leaves the loading area;

- seepage into the excavation area and rainwater that is not diverted shall be collected and transported off-Site for treatment along with other potentially contaminated water;
- the FBAG Site Representative shall direct the removal of all visually evident DNAPL in the area. Collectable liquid DNAPL, if any, shall be containerized and staged in a secure area under FBAG control pending off-Site disposal;
- engineering controls including covering the excavation face with foam or other cover material may be utilized, if necessary, to control emissions from the DNAPL excavation area. The smallest practical excavation shall be maintained. All areas shall be backfilled as soon as possible following excavation; and
- excavations shall be restored as required by the County to best support their activities. Where backfilling is required, clean material of a type suitable to the County will be imported.

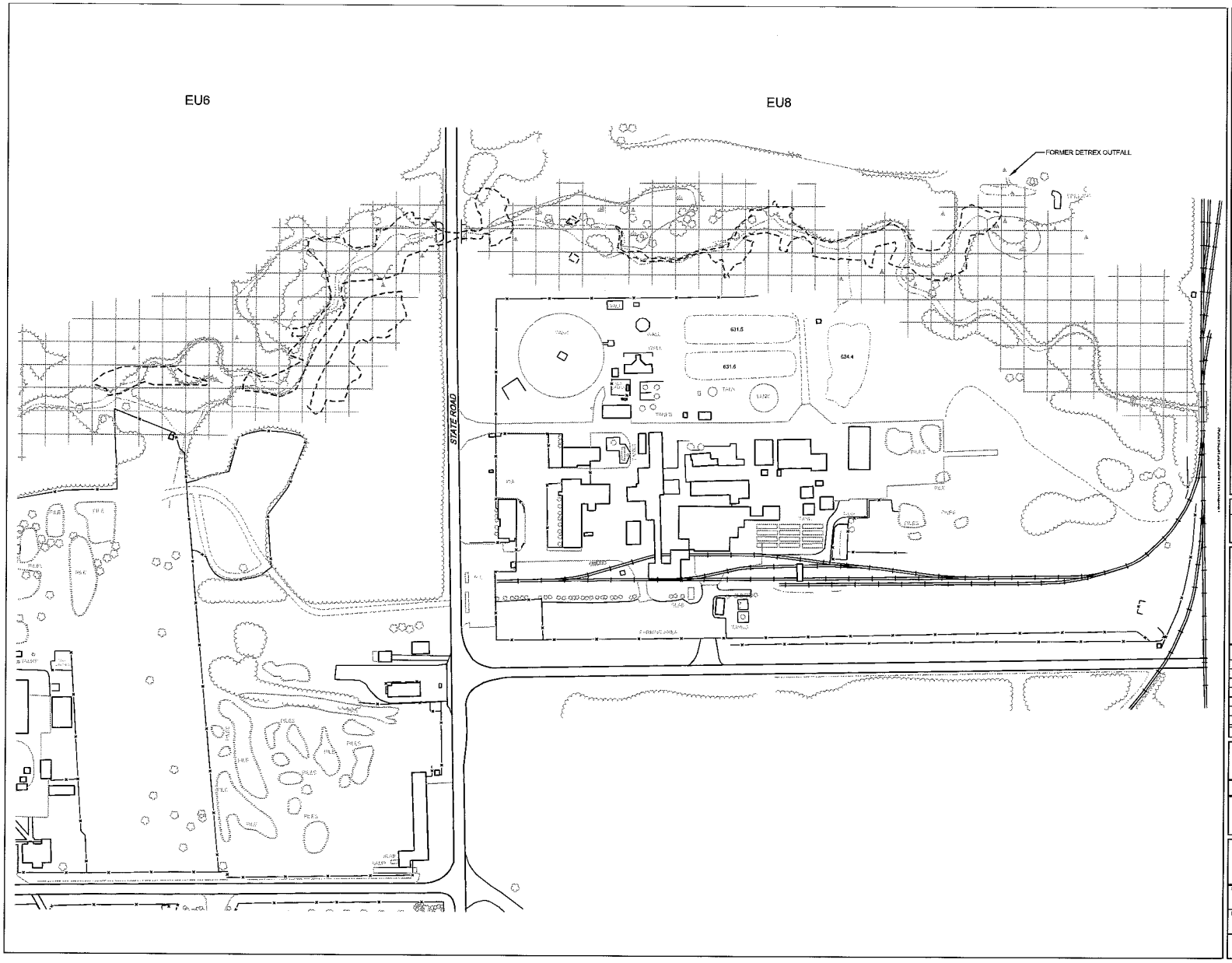
2.3.3 DISPOSAL OF DNAPL MATERIAL

All excavated DNAPL Material and any collected liquid DNAPL, or potentially contaminated water will be characterized for disposal and staged in a secure area under FBAG control pending identification of appropriate disposal facilities. U.S. EPA will be provided with characterization sampling results and disposal facility information for review prior to initiating transportation for disposal. Storage, transportation and disposal activities will be completed in accordance with applicable federal and state regulations.

3.0 REPORTING

U.S. EPA will be notified of upcoming work on the bridge requiring implementation of this work plan by FBAG. FBAG will provide updates on the Site activities on a weekly basis to U.S. EPA during County field activities, provided no unacceptable air monitoring results are noted. Should air monitoring results indicate that additional investigation is required, U.S. EPA will be notified, and updated at each stage of the investigation, DNAPL Material removal, and material disposal, to the extent these activities are required.

Following completion of field activities and material disposal, a report documenting the monitoring completed, any additional actions taken, and detailing any remedial measures will be prepared and submitted to U.S. EPA within 60 days of completion of disposal activities.



No.	Revision	Date	Initial

SCALE VERIFICATION

THIS BAR MEASURES 1" ON ORIGINAL. ADJUST SCALE ACCORDINGLY.

Approved

DRAWING STATUS

Status	Date	Initial

FIELDS BROOK SUPERFUND SITE
ASHTABULA, OHIO

LIMITS OF DNAPL REMOVAL

CONESTOGA-ROVERS & ASSOCIATES

Source Reference:
BECHTEL ASSOCIATES PROFESSIONAL CORPORATION - OHIO

Project Manager:	Reviewed By:	Date:	
IKR	JD	MARCH 2003	
Scale: 1"=100'	Project No.: 11676-10	Report No.: 025	Drawing No.: figure 2.1

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